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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/670,274

09/26/2003

Yong Cheol Park

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EXAMINER

BIBBINS, LATANYA

ART UNIT

PAPER NUMBER

2627

NOTIFICATION DATE

DELIVERY MODE

07/30/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/670,274	Applicant(s) PARK ET AL.	
	Examiner LaTanya Bibbins	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 24-43 and 51-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16, 24-29 and 56-60 is/are allowed.
- 6) ☒ Claim(s) 30-43 and 51-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Election/Restrictions

2. Applicant's election, without traverse, of species "a" (claims 1-16, 24-43, and 51-60) in the reply filed on May 12, 2008 is acknowledged.
3. Further, in the remarks filed on May 12, 2008, Applicant amended claims 1-5, 7, 8, 11, 16, 24, 26-43, and 51-55, cancelled claims 17-23 and 44-50, added claims 56-60, and submitted arguments for allowability of pending claims 1-16, 24-43, and 51-60.

Specification

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: claims 30-43 and 51-55 recite a computer-readable recording medium.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 30-43 and 51-55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 30 recites recording defect management information on the at least one temporary defect management area having a fixed size **and/or** the at least one temporary defect management area having a variable size in a sequential order. However, if the fixed size temporary defect management area and the variable size temporary defect management areas are used alternatively, it is not possible to use both temporary defect management areas in sequential order as recited in claim 30 thus rendering the claim indefinite.

Dependent claims 31-43 and 51-55 do not resolve the 35 U.S.C. 112 second paragraph issues of independent claim 30 recited above and are therefore rejected as incorporating the deficiencies of a claim upon which they depends.

Allowable Subject Matter

7. Claims 1-16, 24-29, and 56-60 are allowed.

8. Claims 30-43 and 51-55 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Regarding claims 1-16, 24-43, and 51-60, none of the references of record, alone or in combination, suggest or fairly teach the limitations of independent claims 1, 29, and 30 in such a manner that a rejection under 35 U.S.C. 102 or 103 would be

proper. The prior art fails to disclose recording defect management information on one of the at least one temporary defect management area having a fixed size and the at least one temporary defect management area having a variable size, wherein the at least one temporary defect management area having a fixed size and the at least one temporary defect management area having a variable size are used in sequential order to record therein the defect management information.

Citation of Relevant Prior Art

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ko et al. (US Patent Number 6,466,532 B1) disclose a recording medium having a spare area for defect management and the management information of the spare area, a spare area allocation method and apparatus, and a defect management method and apparatus. When a primary spare area is allocated for slipping replacement and linear replacement upon initialization, and a remaining portion of the primary spare area after slipping replacement and allocated for linear replacement after initialization are insufficient, a supplementary spare area is allocated. The sizes of the primary and supplementary spare areas are determined by the number of defects generated upon initialization. The information on the sizes of the spare areas, and the remainder state information representing the degree of use of the spare areas, are recorded, so that the spare areas can be efficiently managed. Also, in the defect management method and apparatus, when an area that has already been linearly

replaced is allocated as a supplementary spare area, defective blocks within the allocated supplementary spare area are not used for linear replacement, and the entries of a secondary defect list (SDL) with respect to the defective blocks are not changed.

Naito (US Patent Number 5,068,842) discloses a user area for users to record/reproduce data on the disk, an alternative to store data which was originally intended to be recorded in a user area but was judged as defective by a verify-read user area operation just after recording the data on the user area, and a map area to store the defect management information, indicating which sectors in the user area correspond to sectors in the alternative area. A data storage area of the optical disk can be divided into plural bands each band comprising a map area, an alternative area and a user area. However, some bands have no user area. Four tracks in each band are assigned to the map area and the alternative area respectively, but the number of tracks assigned to the user area is not fixed. Also, it is not specified as to which type of area is located in each band. These parameters can be arbitrarily determined by the users, or can be automatically assigned by the controller in the disk drive.

Ko et al. (US Patent Number 6,714,502 B2) disclose a method of verifying the defect management area (DMA) information of a recordable and reproducible optical disc, and a test apparatus for performing the same. The method of verifying the DMA information includes selecting one among a plurality of test modes for verifying DMA information, setting a test reference according to the selected mode, generating test information from the DMA information, which is generated or updated by a recording and reproducing apparatus to be tested, according to the verification test mode, and

executing the test for verifying the test information using the test reference in the selected mode.

Park (US Patent Number 6,542,450 B1) discloses a method for assigning a spare area in a rewritable optical recording medium is disclosed, in which a supplementary spare area is assigned as necessary if an enlargement of the spare area is required. The method includes determining an allowable size of the supplementary spare area, and assigning the supplementary spare area in variable increments within the allowable size determined.

Park (US Patent Number 6,493,301 B1) discloses a rewritable optical medium and a method of managing its defect area is disclosed. The DMA condition or initially assignable spare area size in the present invention is determined based upon the interrelation between the spare area size and the DMA condition. Namely, the PDL entry condition among the DMA condition is determined to allow a minimum spare area for linear replacement in the initially assignable spare area after slipping replacement during formatting to facilitate management of the defect area of a rewritable optical medium.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaTanya Bibbins whose telephone number is (571)270-1125. The examiner can normally be reached on Monday through Friday 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LaTanya Bibbins/
Examiner, Art Unit 2627

/Wayne Young/
Supervisory Patent Examiner, Art Unit 2627